

wherein the actuated mechanism comprises an elongated actuating arm rotatably coupled to the caliper housing to cause the actuated mechanism to move the first friction member from the release position towards the braking position; and

wherein the actuating arm has a curved guide surface with a first portion coincident with a cable clamp and a second portion that extends from the first portion towards the cable support so that the cable, when coupled to the cable clamp, approaches the guide surface from the opening in the cable support essentially tangent to the guide surface and is supported by the guide surface when the first friction member is in the release position.

38. (New) A cable disc brake according to claim 37 wherein the second portion of the guide surface is formed by a projection that extends towards the cable support.

39. (New) A cable disc brake according to claim 38 wherein the projection has a radially outer portion that extends towards the cable support and a radially inner portion that extends away from the cable support back towards a side surface of the actuating arm.

40. (New) A cable disc brake according to claim 39 wherein the projection is disposed in close proximity to a radially outermost portion of the actuating arm.

41. (New) A cable disc brake according to claim 37 further comprising a biasing mechanism that applies a biasing force between the caliper housing and the actuating arm.

42. (New) A cable disc brake according to claim 41 wherein the biasing mechanism comprises a spring.

43. (New) A cable disc brake according to claim 41 further comprising an adjusting mechanism that adjusts the biasing force applied between the caliper housing and the actuating arm.

44. (New) A cable disc brake according to claim 43 wherein the biasing mechanism comprising a spring having first end and a second end, and wherein the adjusting mechanism adjusts the biasing force by moving one of the first end and the second end relative to the other one of the first end and the second end.

45. (New) A cable disc brake according to claim 44 wherein the first end of the spring is coupled relative to the caliper housing at a first position, and wherein the adjusting mechanism adjusts the biasing force by coupling the first end of the spring relative to the caliper housing at a second position different from the first position.

46. (New) A cable disc brake according to claim 44 wherein the second end of the spring is coupled relative to the actuating arm at a first position, and wherein the adjusting mechanism adjusts the biasing force by coupling the second end of the spring relative to the actuating arm at a second position different from the first position.

47. (New) A cable disc brake according to claim 37 further comprising a cable adjusting bolt fitted within the opening in the cable support.

48. (New) A cable disc brake according to claim 37 wherein the caliper housing includes a mounting flange for mounting the caliper housing to the bicycle, and wherein the mounting flange includes a slot that allows adjustment of the caliper housing to and from the rotor.

49. (New) A cable disc brake according to claim 37 wherein the actuating arm rotates around a rotational axis, wherein the caliper housing includes a mounting flange for mounting the caliper housing to the bicycle, and wherein the mounting flange includes an opening for receiving a mounting bolt therethrough substantially perpendicular to the rotational axis.

50. (New) A cable disc brake according to claim 37 wherein the actuating arm rotates around a rotational axis, and wherein the caliper housing includes:

a first mounting flange with a first opening for mounting the caliper housing to the bicycle;
a second mounting flange with a second opening for mounting the caliper housing to the bicycle;

wherein the first opening is disposed above the rotational axis; and
wherein the second opening is disposed below the rotational axis.

51. (New) A cable disc brake according to claim 50 wherein the caliper housing is structured such that, when the caliper housing is mounted to a front fork of the bicycle, the cable support is disposed above the rotational axis.

52. (New) A cable disc brake according to claim 51 wherein the caliper housing is structured such that, when the caliper housing is mounted to the front fork of the bicycle, the guide surface is disposed rearwardly of the rotational axis.

53. (New) A cable disc brake according to claim 52 wherein the caliper housing is structured such that, when the caliper housing is mounted to the front fork of the bicycle, the cable support extends rearwardly of the rotational axis.

REMARKS

In this paper, claims 37-53 are added. After entry of the above amendment, claims 1-53 are pending.

Newly added independent claim 37 is broader than the issued claim 1 in that it omits the input and output cams. By completely omitting these elements, which were amended during prosecution of the original patent application, claim 37 is not subject to the recapture rule B.E. Meyers & CO. v. U.S. 56 USPQ.2d 1110 (U.S. Ct.Fed.Cls. 2000). Claim 37 is narrower than claim 1 in that it recites details of the actuating arm for the actuated mechanism

Support for the matter recited in the added claims may be found in the specification and drawings as follows:

For claim 37, the specification supports a cable disc brake for a bicycle comprising a caliper housing ((30), Fig. 4) with a cable support ((44), Figs. 4 and 7) having an opening (72) for guiding a cable (25a) therethrough; a first friction member (left side member (32), Fig. 6) coupled to the caliper housing for movement between a release position and a braking position as described at column 11, lines 12-29; a second friction member (right side member (32) in Fig. 6) coupled to the caliper housing (30) and arranged substantially parallel to the first friction member (32) as shown in Fig. 5 to form a rotor receiving slot therebetween; and an actuated mechanism movably coupled to

the caliper housing (30) to move the first friction member (32) in an axial direction from the release position towards the second friction member (32) to the braking position as described at column 11, lines 12-29. The actuated mechanism comprises an elongated actuating arm ((98), Figs. 4 and 44) rotatably coupled to the caliper housing (30) to cause the actuated mechanism to move the first friction member (32) from the release position towards the braking position, wherein the actuating arm (98) has a curved guide surface (the surface pointed to by the lead line for reference number (98i)) with a first portion (the portion containing the opening (98g) in Fig. 44) coincident with a cable clamp (103) and a second portion (pointed to by the lead line for reference number (98i)) that extends from the first portion towards the cable support as shown in Fig. 4 so that the cable (25a), when coupled to the cable clamp (103), approaches the guide surface (98i) from the opening (72) in the cable support (44) essentially tangent to the guide surface (98i) and is supported by the guide surface (98i) when the first friction member (32) is in the release position.

For claim 38, Fig. 44 shows that the second portion of the guide surface is formed by a projection (98i) that extends towards the cable support (44).

For claim 39, Fig. 44 shows that the projection (98i) has a radially outer portion (the left side convex surface pointed to by the lead line for reference number (98i)) that extends towards the cable support (44) and a radially inner portion (the right side concave surface opposite the convex surface) that extends away from the cable support (44) back towards a side surface of the actuating arm (98).

For claim 40, Fig. 44 shows that the projection (98i) is disposed in close proximity to a radially outermost portion of the actuating arm (98).

For claim 41, Figs. 5 and 6 show a biasing mechanism (99) that applies a biasing force between the caliper housing (30) and the actuating arm (98).

For claim 42, Figs. 5 and 6 show that the biasing mechanism (99) comprises a spring.

For claim 43, the specification at column 10, lines 55-67 and Figs. 4, 7 and 48-51 describe an adjusting mechanism (56, 99, 102) that adjusts the biasing force applied between the caliper housing (30) and the actuating arm (98).

For claim 44, the specification at column 10, lines 55-67 and Figs. 4, 7 and 48-51 describe the biasing mechanism comprising a spring (99) having a first end (99b) and a second end (99c), wherein the adjusting mechanism adjusts the biasing force by moving one of the first end (99b) and the second end (99c) relative to the other one of the first end (99b) and the second end (99c).

For claim 45, the specification at column 10, lines 55-67 and Figs. 4, 7 and 48-51 illustrate wherein the first end (99b) of the spring (99) is coupled relative to the caliper housing (30) at a first position (56), and wherein the adjusting mechanism adjusts the biasing force by coupling the first end (99b) of the spring (99c) relative to the caliper housing (30) at a second position (another one of the bores (56)) different from the first position.

For claim 46, the specification at column 10, lines 55-67 and Figs. 4, 7 and 48-51 illustrate wherein the second end (99c) of the spring (99) is coupled relative to the actuating arm (98) at a first position (102), and wherein the adjusting mechanism adjusts the biasing force by coupling the second end (99c) of the spring (99) relative to the actuating arm (98) at a second position (another one of the bores (102)) different from the first position (102).

For claim 47, the specification at column 7, lines 33-48 and Figs. 4, 5, 13 and 15 describe a cable adjusting bolt (73) fitted within the opening (72) in the cable support (44).

For claim 48, Figs. 2, 7 and 10 show that the caliper housing (30) includes a mounting flange (43) for mounting the caliper housing (30) to the bicycle, and the specification describes at column 7, lines 27-32 that the mounting flange (43) includes a slot (70) that allows adjustment of the caliper housing (30) to and from the rotor.

For claim 49, Figs. 2, 4, 5 and 7 illustrate how the actuating arm (98) rotates around a rotational axis (A), wherein the caliper housing (30) includes a mounting flange (43) for mounting the caliper housing (30) to the bicycle, and wherein the mounting flange (43) includes an opening (70) for receiving a mounting bolt (29a) therethrough substantially perpendicular to the rotational axis.

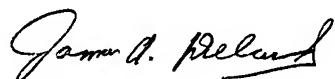
For claim 50, Figs. 2, 4, 5 and 7 illustrate how the actuating arm rotates (98) around a rotational axis (A), wherein the caliper housing (30) includes a first mounting flange (upper flange (43) in Fig. 7) with a first opening (70) for mounting the caliper housing (30) to the bicycle and a second mounting flange (lower flange (43) in Fig. 7) with a second opening (70) for mounting the caliper housing (30) to the bicycle. As shown in Fig. 4, the first opening (70) is disposed above the rotational axis (A), and the second opening (70) is disposed below the rotational axis (A).

For claim 51, Figs. 2 and 4 show that the caliper housing (30) is structured such that, when the caliper housing (30) is mounted to a front fork (15a) of the bicycle, the cable support (44) is disposed above the rotational axis (A).

For claim 52, Figs. 2 and 4 show that the caliper housing (30) is structured such that, when the caliper housing (30) is mounted to the front fork (15a) of the bicycle, the guide surface (at (98i) in Fig. 44) is disposed rearwardly of the rotational axis (A) (the rear of the bicycle is on the right side of Fig. 2).

For claim 53, Figs. 2 and 4 show that the caliper housing (30) is structured such that, when the caliper housing (30) is mounted to the front fork (15a) of the bicycle, the cable support (44) extends rearwardly of the rotational axis (A).

Respectfully submitted,



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